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REARING COUAS AT WELTVOGELPARK WALSRODE IN GERMANY

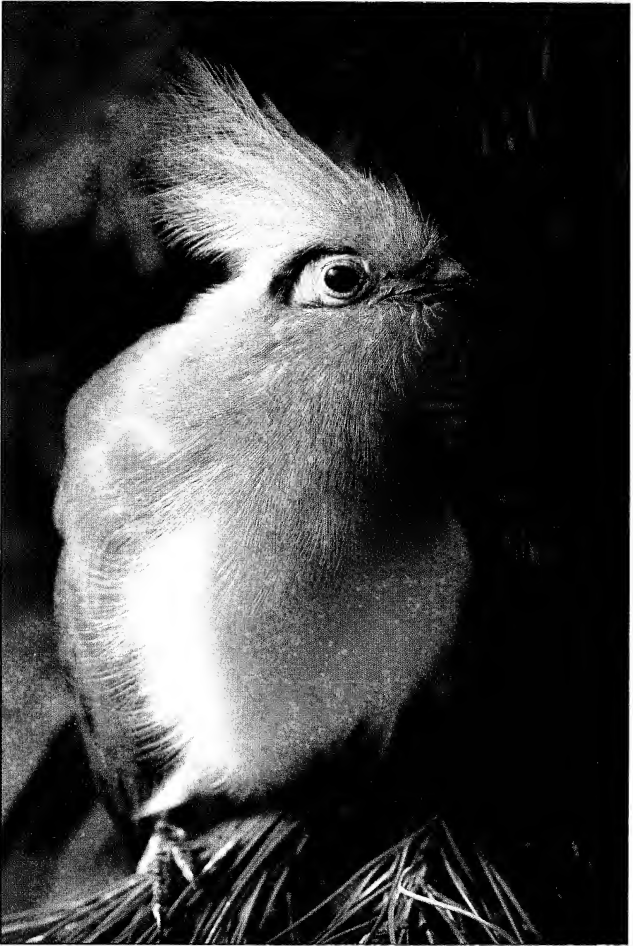
by Anne Hoppmann

Here in Europe we are all acquainted with the Common Cuckoo *Cuculus canorus*, a highly migratory species which visits Europe each spring and lays its eggs in the nests of other species of birds and leaves them to incubate its eggs and rear its young. What is perhaps less well-known is the fact that out of the 136 species of Cuckoo (Cuculidae family) only 53 species are brood parasites (like the Common Cuckoo), the rest build their own nests, incubate their own eggs and rear their own young.

Among the many non-parasitic cuckoos are the couas. All belong to the genus *Coua* and are endemic to the island of Madagascar, where they inhabit different types of forest. One of the 10 species, the Snail-eating or Delalande's Coua *C. delalandei* is extinct, leaving nine existing species: the Giant Coua *C. gigas*, Coquerel's Coua *C. coquereli*, Red-breasted Coua *C. serriana*, Red-fronted or Reynaud's Coua *C. reynaudii*, Red-capped Coua *C. ruficeps*, Running Coua *C. cursor*, Crested Coua *C. cristata*, Verreaux's Coua *C. verreauxi* and Blue Coua *C. caerulea*.

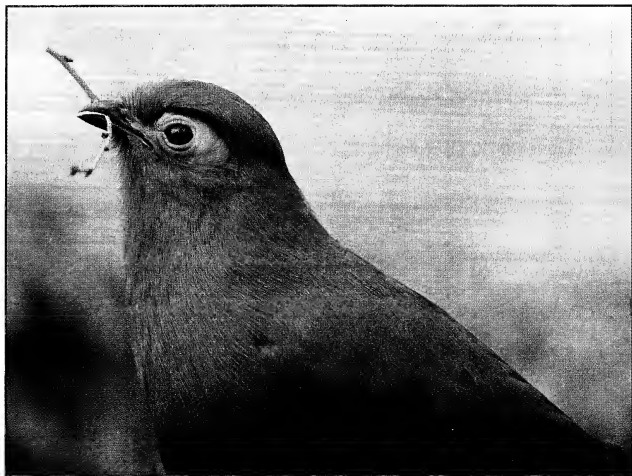
In 1998, in cooperation with Tsimbazaza Zoo on Madagascar, Weltvogelpark Walsrode obtained its first species of coua - the Crested Coua. In 2003, another species the Blue Coua was added to the bird collection at Walsrode. Then in 2006, the largest living species of coua, the Giant Coua was added to the collection and visitors can now see three species of couas at Weltvogelpark Walsrode. All three species have been bred here with great success for the first time outside of Madagascar. The first success was achieved in 2000, when young Crested Couas were reared successfully. The Giant Couas bred successfully after only a year at Walsrode and the Blue Couas bred for the first time two years after arriving here. Since then they have produced several young each year.

The Blue Coua lives in habitat with dense vegetation and its lifestyle remained largely unknown until 2001, when an expedition from Weltvogelpark Walsrode found nests of this species for the first time. The



Weltvogelpark Walsrode

Adult Crested Coua.



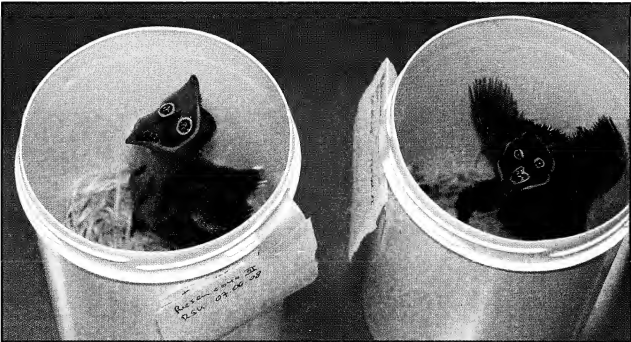
Weltvogelpark Walsrode

Adult Blue Coua.



Weltvogelpark Walsrode

Adult Giant Coua.



Weltvogelpark Walsrode
**Showing the different palate and tongue markings of the Blue Coua chick (right) and
Giant Coua chick (left).**



Weltvogelpark Walsrode
Palate and tongue markings of a Crested Coua chick.



Weltvogelpark Walsrode

Blue Coua chick at 25 days old showing the distinctive palate and tongue markings.

natural habitat of Madagascar was and remains degraded through the logging of large parts of the rainforest. At the moment couas are not threatened but they are perfect flagship species for the endangered flora and fauna of Madagascar.

The rearing of couas in captivity is a considerable challenge for couas are sensitive birds which are susceptible to stress. Thus, the pairing of the birds is done by experienced members of our staff. In addition, the enclosures must be heavily planted and equipped with enough branches so that the birds can hide and avoid each other if need be. As a general rule they are not aggressive towards other species of birds.

Last year (2011) we again succeeded in raising young behind the scenes. Four Blue Couas chicks were hatched and needed to be fed and cared for throughout the day. The Blue Coua is a very beautiful bird with magnificently coloured plumage. In addition, the eyes are surrounded by a striking oval-shaped area of light blue bare skin. The Blue Coua is endemic

to Madagascar, where it inhabits the subtropical or tropical moist rainforests in the east and north-west of the island. It is an arboreal species that moves among the branches of trees and is rarely seen on the ground. The Blue Coua can be seen in Europe only at Weltvogelpark Walsrode and Köln Zoo, which received it birds from Walsrode. In contrast to the other species of couas, the Blue Coua lays only one egg per clutch, whereas the Giant Coua lays four eggs and the Crested Coua lays two eggs.

Several times we have tried to let the Blue Couas incubate their own eggs and rear their own young, but have found that the embryos died during incubation or if the eggs did hatch, the chicks failed to survive. Therefore, all of the young hatched at Walsrode are hand-reared by our experienced staff. The eggs are incubated for approximately 14 days. Like the adults, young couas are also very sensitive and susceptible to stress. During the first few days the chicks are fed up to eight times a day, beginning early in the morning and continuing through until late in the evening. They are fed the innards of day old pinkie mice, pieces of fruit and drone maggots. The amount of food and its composition is adjusted as the chicks grow bigger, until they receive the same food as the adults, namely pieces of fruit, meat, pellets (for fruit-eating birds) and livefood.

After hatching each chick is placed in a small bowl with a layer of bedding in place of the real nest. It is especially important that the chicks are not able to spread their legs. We use wood-wool to line the bowl so that the young have something on which they can get a good grip. Shortly before fledging at the age of three to four weeks old the chicks are moved to larger boxes. They are still relatively small and wobbly. They are fully grown after eight to 10 weeks.

Conspicuous characteristics of all couas are the markings of the palate and tongue which differ from species to species. In the wild these are used to frighten off enemies and in addition also encourage the parents to feed the chicks. With these markings being different and unique to each individual species, a coua carries its own 'identity card.'

Anne Hoppmann is Bird Registrar at Weltvogelpark Walsrode which this year is celebrating its 50th Anniversary.

MIXED FORTUNES FOR SOCIETY'S ADOPTED HORNBILLS

In 2011 the society adopted a pair of White-crested Hornbills *Berenicornis comatus* and a pair of Wreathed Hornbills *Aceros (Rhyticeros) undulatus* as part of the Hornbill Family Adoption Program, run by the Hornbill Research Foundation, based at Mahidol University, Bangkok, Thailand.



The female White-crested Hornbill - the bird in the background with the black neck and underparts - broke out of the nest cavity on April 4th and did not return. The cavity had previously been used by a pair of Rhinoceros Hornbills.

On March 25th 2011 the female White-crested Hornbill began to seal herself into a cavity 6m (almost 20ft) above the ground in a 60m (approx. 196ft) tall *Shorea curtisii*. Throughout the period the female was in the nest cavity, the male brought fruits (*Ficus chartaceae*, *F. caulocarpo*, *Artocarpus rigida* and *Horsfieldia tomentosa*) to the nest about every 10-15 minutes. However, the female broke out of the nest cavity on April 4th 2011 for an unknown reason and did not return. Although we did not know at the time we chose this pair, it has failed to produce chicks since 2009. The nest cavity on Budo Mountain, part of Budo-Sungai Padi National Park, Kapo District, Pattani Province, Thailand, had previously been used by a pair of Rhinoceros Hornbills *Buceros rhinoceros*.

Messrs Masuding and Arbus Seeba, who have been field assistants since 1994 and 2007 respectively, are the guardians of the above nest. They

are responsible for monitoring six Great Hornbill *B. bicornis* nests, three Rhinoceros Hornbill nests, two White-crowned Hornbill nests and two Bushy-crested Hornbill *Anorrhinus galeritus* nests. More than 40 chicks have fledged from these nests since they have been looking after them.

The pair of Wreathed Hornbills fledged a single chick. On April 2nd 2011 the female began to seal herself in a cavity 33m (approx. 108ft) above the ground in a 46m (approx. 150ft) tall *Syzygium* sp. Of the food brought to the nest 99.6% consisted of fruits. Three species of fig (*Ficus sundaica*, *F. deltoidea* and *F. benjamina*) made up 51.3% of these fruits, while 48.7% were non-fig species (*Dysoxylum macrocarpum*, *Canthium glabrum*, *Polyalthia clavigera* and *Horsfieldia tomentosa*). The remaining 0.4% consisted of centipedes and millipedes. The length of the nesting period, measured from the sealing in by the female to the fledging of the chick, was approximately 104 days. Data were collected from April 3rd-July 16th. This pair, which also nested on Budo Mountain, part of Budo-Sungai Padi National Park, but in Ruso District, Narathiwat Province, has produced at least nine chicks since 1999.

The guardian of the above nest is Hawa Kajay, who has been a field assistant since 1999. He is responsible for three Great Hornbill nests, three Rhinoceros Hornbill nests, two Wreathed Hornbill nests and a Helmeted Hornbill *B. vigil* nest. More than 20 chicks have fledged since Hawa, who also acts as an instructor for the foundation's education and conservation programs, has looked after these nests.

During 2011 the six species of hornbills on Budo Mountain raised a total of 16 chicks: six Great Hornbill chicks, seven Rhinoceros Hornbill chicks, one Wreathed Hornbill chick and two Bushy-crested Hornbill chicks. The White-crested and Helmeted Hornbills failed to produce any young.

One hundred and ninety-two nests belonging to six species of hornbill were recorded on Budo Mountain during the period 1994-2011. Twenty of these nests (10.4%) belonged to Wreathed Hornbills and 10 (5.2%) to the White-crested species. A total of 536 chicks were produced by the six species, of which 42 (7.8%) were Wreathed Hornbill chicks and 11 (2.1%) were White-crested Hornbill chicks.

Pilai Poonswad, Acting President of the Hornbill Research Foundation, has written to thank the society for supporting the Hornbill Family Adoption Program in 2011. Despite incidents of unrest in Thailand's southernmost provinces and prolonged heavy rain and storms in the south of the country, the Hornbill Family Adoption Program continued, with some interruptions, and the Hornbill Research Foundation is grateful for our support in assisting to conserve these fascinating birds in Thailand and needs and welcomes our continued support.

THE SOUTHERN SCREAMER *Chauna torquata* AT PAIGNTON ZOO ENVIRONMENTAL PARK

by Jo Gregson

The three species of screamer (Anhimidae family), which are closely related to waterfowl, are found in South America. The Northern (Black-necked) Screamer *C. chavaria* occurs in northern Colombia and north-west Venezuela; the Horned Screamer *Anhima cornuta*, the most widely distributed of the three, occurs over a large area northern tropical South America; and the Southern (Crested) Screamer *C. torquata* occurs from south-east Perú, northern Bolivia and southern Brazil, southwards to Paraguay, Uruguay and northern Argentina. Their favoured habitats are open wetlands, flooded fields and marshland. Screamers are good swimmers and take to deeper water in search of food. They sit high in the water due to the many air sacs beneath their skin and their very light pneumatic bones. They are adaptable birds that occasionally visit dry agricultural fields where they can damage farmers' crops and become pests. Currently there are no notable conservation issues concerning any of the three species (the Horned Screamer is considered to be extinct on the island of Trinidad, on which it formerly bred), however, as with many other species, threats are likely to occur as wetlands are drained to make way for livestock and crops.

Their small head, large rounded body, long, partly-webbed toes and rather ungainly appearance may deceive the casual observer into believing that they are docile. However, they move quickly through the water when they need to and can fly remarkably high considering their lack of aerodynamics.

Their diet consists of water vegetation, roots, shoots and green leaves. They also use this type of vegetation to build their nests in shallow water or at the water's edge. The nests are attended regularly and built higher each day, thereby, helping to keep them water resistant and above the water level.

They usually lay four eggs but as many as seven have been recorded. The chicks are nidifugous and can swim very well from a few days of age. Most of their time is spent in water often hiding amongst water plants and never straying too far from their parents until they fledge at about 10 weeks of age. Screamers are very attentive parents and the chicks rarely leave their sight. The claw on the bend of each wing may be used to fend off predators that are threatening them. They also possess a piecing alarm call which can be heard up to 3km (approx. 1.8 miles) away and often other screamers will join in to alert other birds to the presence of a skulking hunter.

*Ray Wiltshire*

Parent and a chick aged just over one week old.

Screamers which have been hand-reared can become imprinted very easily in the same way that geese do. Some South American poultry keepers like to have tame screamers running with their flocks of poultry as their alarm calls are so effective at warning other birds of approaching predators.

Here at Paignton Zoo Environmental Park we have a pair of Southern Screamers. The two 2006-hatched birds made their first breeding attempt in 2010. Caution is needed when pairing screamers, as males can bully females if they are housed in a small enclosure. Our birds were housed in adjacent aviaries for a few weeks before being placed together.

Screamers spend a lot of time on the ground but also like to sit in trees and on top of bushes watching over their family. For this reason our birds are kept full-winged in a large netted aviary. Screamers can still fly high even when they have had one wing clipped and those kept on open paddocks need to be routinely checked to see how quickly the new feathers are growing.

Nest building begins about April and continues through May, therefore, we supply our screamers with green vegetation and dry straw and grasses towards the end of April. Due to the rainfall at this time of the year, dry material is offered each day.

There is a long incubation period which lasts about 45 days, with both birds taking turns to incubate the eggs. Once the chicks have hatched the nest may be dismantled and rebuilt a short distance away, then a few days later it will be moved back to the first site. Both parents brood the chicks and have no fear of the zoo visitors and make excellent exhibits which show how birds care for their young.

The diet fed to our adult birds is very simple. It consists of large quantities of lettuce, grated carrots and apples and chopped cabbage. The food is dusted with the vitamin/mineral supplement Vionate. They also graze on grass and other vegetation. When the chicks hatch we add mealworms and chick crumbs to the diet. After being guided by both parents for a few days the chicks learn very quickly which items of food to select. The family group live and forage together until the next breeding season, when the male begins to drive the young birds away.

In the wild screamers form large wintering flocks which can contain hundreds of birds. The loud alarm call of the screamer helps to keep the birds safe during the winter months. Farmers and hunters in some areas shoot screamers, but they are rarely eaten as their spongy flesh and network of air sacs makes their flesh unsavory and therefore not a popular choice for the dinner table.

*Jo Gregson is Curator of Birds at Paignton Zoo Environmental Park, Totnes Road, Paignton, Devon TQ4 7EU, UK. She is Vice Chair of the EAZA (European Association of Zoos and Aquaria) Ratites TAG (Taxon Advisory Group) and Vice Chair of the EAZA Pigeons and Doves TAG, as well as EEP (European Breeding Programme) Coordinator for the Wrinkled Hornbill *Aceros corrugatus*. E-mail: jo.gregson@paigntonzoo.org.uk*

RELEASING MACAWS IN COSTA RICA

by Bryan Andrews

I am privileged to be both living and working in a Costa Rican rainforest tucked in against the Panamanian border and continue to feel wonderment at the biodiversity which surrounds us and have no idea just how much animal and plant life we are looking at. The figures given by La Selva Biological Station for this area of Costa Rica include 1,668 species from 121 families of vascular plants including trees, shrubs, herbs, epiphytes and lianas, but excluding introduced species; these are what we see when we look for an equally diverse group of mammals, birds, amphibians and insects. There is nothing, absolutely nothing, which compares with being in a tropical lush evergreen rainforest and yet the indigenous people and long-term residents of the areas in which these forests exist are, due to the advent of ecotourism, excluded from these very forests by virtue of the ever increasing entrance fees to the national parks and the unbelievably high costs of staying at the privately owned ecotourist lodges. If, and it is a big if, some of the income generated were to be fed back into genuine conservation research, not only that undertaken by scientists from the temperate zones but also by students of the two fine universities in Costa Rica, then a better and more justified use of at least part of the income derived would have been found. Of even greater help long-term would be an environmental educational programme for local school pupils from the age of eight, to help build-up their pride in the conservation of the fauna and flora around them.

Although the above is of great concern to me, it is the reintroduction of the Scarlet Macaw *Ara macao* into the area in which I live, that has enabled me to fuel my passion for birds. This emblematic species was abundant in this area of Costa Rica bordering the Pacific Ocean until the mid-1950s. It was during this period that fragmentation of the rainforests occurred as a result of the need for pasture to accommodate the production of beef cattle to satisfy the stomachs of North America, leaving just 20% of original forest cover, which coupled with increased poaching for the pet trade reduced the number of macaws in this region to nil.

While the concept of reintroducing captive-bred birds will remain controversial, my belief is that to stand back and do nothing is far more of a sin. We now have enough knowledge to overcome the arguments against reintroductions and thereby stem the dwindling numbers of parrots. During the past 20 years, aviculturists have with varying degrees of sophistication managed to perfect the breeding of both the Scarlet Macaw and the Great Green Macaw *A. ambiguus*. It is this coupled with well documented field studies which have enabled the project that I have been with for the past

three years to begin in 2002 a programme of releasing small groups of Scarlet Macaws at approximately three-and-half years of age. These birds are bred and reared at a complex in the Central Valley of Costa Rica, where a large captive population is kept containing enough individual bloodlines to ensure as greater genetic diversity as possible. None of the birds at the centre were taken directly from the wild, thereby impairing the conservation of the wild stock, but were accumulated via customs officials and the police, who handed them over to what was once a privately owned bird sanctuary started 26 years ago. The collection grew and developed and 12 years ago turned into a project, the aim of which is the reintroduction into the wild of the captive-bred progeny. To date (April 2012) a total of 74 Scarlet Macaws have been released, all of whom were photographed prior to release and their unique pattern of yellow wing feathers recorded, in addition to which each was fitted with a closed ring (band) with an individual number. This makes it relatively easy to visually monitor the birds. They are identified by a process of elimination, depending on whether they have a ring (band) on the left or right leg, whether it is a flat or round type and then if the number cannot be read through binoculars, we resort to checking the aforementioned wing patterns. Birds without a ring (band) are whenever possible photographed and recorded as having been hatched in the wild during the previous three years, as the earlier released adults become sexually mature. Due to the young hanging about with the parents for as long as 18 months it is often possible to identify which young belong to which parents. However, it is all too easy to become bogged down describing the various methods used to monitor the birds, suffice to say that a pair of legs, some binoculars and the patience of a saint are all that are required. Any spare time is spent wondering why we cannot see a brilliant red and yellow bird 86cm (approx. 2ft 10in) in length, with a wingspan of 115cm (approx. 3ft 9in), probably sitting in a tree right in front of us.

To ensure the well-being of the birds, they undergo a series of regular health checks, which are carried out at the same time as they are routinely wormed at the breeding centre. Further checks are made prior to the birds being moved to the release site, with blood samples being taken under veterinarian supervision. A strict protocol has to be followed to comply with the rules of Minae the government body in Costa Rica which deals with all environmental issues and is responsible for the granting of all the licences that are required before any releases can even be contemplated. The rules include making available to its office completed records for each and every bird at the breeding centre, showing where they originated from, all subsequent movements within the centre and, should they die, this must be documented and a post mortem report included along with the complete



The release cage is at the top right-hand side of the aviary above the safety porch.

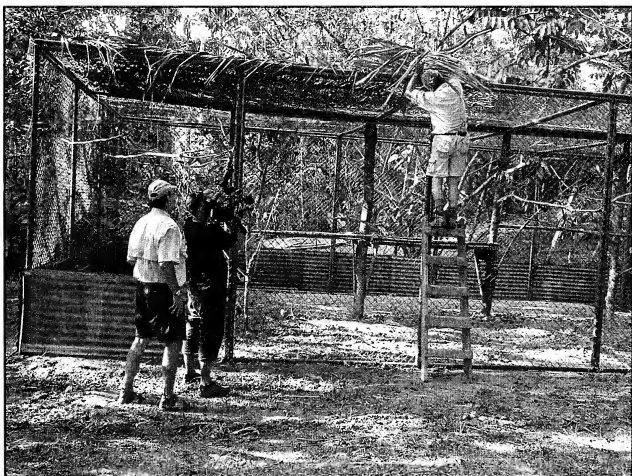
medical history of the bird, etc; moreover, this all has to be translated into Español.

Photographs show the release aviary being built. Each of the steel panels weigh 90kg (almost 200lbs) and have to be transported into the primary rainforest at an altitude of 1,600ft (approx. 490m). Upon being assembled the sections are sunk approximately 20cm (8in) into the ground and corrugated sheeting is needed to deter snakes from entering the aviary, which was a problem encountered with the previous aviary, which had a wooden framework. Before being replaced by the present aviary, the latter had been used for seven releases and had seen over 60 macaws take to the skies before a bad storm brought some of the surrounding trees crashing down on top of it and damaging it beyond repair. Fortunately, there were no birds housed in it at the time.

The expensive new aviary has been designed in such a way that it can be dismantled relatively easily and moved to a new site. This will enable it to be used for the release of another group of Scarlet Macaws at a site in the north-west of Costa Rica. This is again a region which no longer supports a wild population, but thanks to a large reforestation project and the cooperation of the farming community in the surrounding area it has become possible to reintroduce some more of these stunning birds back into the wild



The aviary prior to having part of the roof thatched with palm leaves and the sides snake-proofed.



The author being filmed by Canamedia for a Canadian production on macaw conservation.

where they belong. To anyone who doubts whether the effort is worth it, I would ask, what is the alternative? The reforestation of large areas of land is, of course, the long-term answer, but the simple maths show that the wild population will increase only if more than two young hatched by each pair survive and they too reproduce, less than this and we are only delaying the end of yet another species.

Each group of macaws remains there for approximately two months prior to release until they are weaned onto the fruits and nuts of the surrounding area, a procedure which follows a standard soft release protocol and ensures that the birds are ready for life in the wild. The largest proportion of their diet consists of Guavas *Psidium guayava* and Beach Almonds *Terminalia cotappa*, both of which are abundant within a 10km (approx. 6 mile) radius of the release site, with the almond trees forming a coastal corridor northwards and thereby assisting the dispersal of the birds from the release site and providing them with a natural flyroute.

It is the ongoing dispersal of this reintroduced population which interests me now and which I am recording, as the 2011 release was the final release in this region for, barring mishaps, the population has now reached a self-sustaining level. The monitoring will continue, using visual identification to better understand and map the movement patterns of the birds. The use of radio telemetry has been deemed to be too invasive and beyond the finances of the project. At the time of writing (April 2012) adult macaws can be seen flying with their newly-fledged young and overhead I can hear the deafening screeches which announce a flypast by groups of juvenile macaws behaving badly and reminding me of football hooligans.

It is to be hoped that the number of trees suitable as nest sites can be maintained because the felling of such trees in this region would again send this species into decline. My own research shows that the Scarlet Macaw is not easily seduced into using a nest box, unlike some other species which use them to good effect.

Last year saw the first release of captive-bred Great Green (Buffon's) Macaws, a species with a courtship display unlike any other macaw, in which the male gives an incredibly loud shriek of a call, clasps the perch with both feet and performs a figure-of-eight motion. Although the breeding and rearing of these birds was undertaken by the same team responsible for breeding the Scarlet Macaws, the release took place on the Caribbean side of southern Costa Rica, again in an area from which the species was extirated in the 1950s. It is in the north-eastern corner of Costa Rica, tucked up against the border with Nicaragua, that a large stable wild population still exists.

As with the Scarlet Macaw, the availability of suitable nest trees will be a key part of the long-term success of the reintroduction programme, with

an immediate threat being the continued logging of *Dipteryx panamensis*, a species of tree which is critical both for providing food and suitable nesting cavities. Without the enforcement of already existing laws the effort put into this and other breeding projects will have been in vain.

Only time will tell if the ever increasing pressure which ecotourism puts on the environment can itself be monitored to ensure that as little harm as possible is done to these regions in which work to restore and conserve the fauna and flora is needed and is being undertaken at present. Sadly, as is often the case, the majority of hotels, restaurants and other businesses which cater for the tourist industry are owned by foreigners and it is difficult for the local population where I live to get their heads around the idea that via the conservation of what they have, they will benefit from ecotourism.

Bryan's previous articles for the magazine were about breeding the Elegant Crested Tinamou Eudromia e. elegans and the UK first breeding of the White-headed Mousebird Colius leucocephalus (Vol. 112, No.3, pp.111-115 & 116-118 respectively (2006)). If you would like to know more about the macaw releases in Costa Rica, Bryan can be contacted at the following e-mail address: 1freelapa@gmail.com

IMPORTANT NOTICE

Will members please note that their subscription for 2013 will become due on January 1st. Please also note that the Avicultural Society account is now at Barclays Bank. As the NatWest account has been closed, all future standing orders, subscriptions and other payments should be made to Barclays Bank, Burnham-on-Crouch Branch. Please quote: Account No.13296954, Sort Code 20 54 30. Please ensure that you include your name as the account reference otherwise we cannot match payments. In case of difficulty please contact the Hon. Secretary and Treasurer whose details can be found on the inside front cover of the magazine.

Those who prefer to pay their subscription in US dollars can again send a check or money order, US\$40.00 for receiving the magazine by regular mail or US\$50.00 by air mail, to The Avicultural Society, c/o Jane Cooper, 12650 Hearst Road, Willits, California 95490-9231, USA. All checks and money orders should be payable to The Avicultural Society.

All members can now, if they wish, pay their subscription by Paypal.

NATIVE PASSERINES IN NORTH AMERICAN ZOOS

by Justin C. Hickman

I have compiled the following list of North American passerines housed in North American institutions. It is organised by family and was compiled using the International Species Information System (ISIS) - Species holding database.

The four largest North American passerine collections are those at Cove Forest at River Journey, Tennessee Aquarium; the North American Migratory Songbird Aviary, Columbus Zoo, Ohio; the Laurentian Maple Forest, Biodome de Montreal, Quebec, Canada; North Carolina Zoo, North Carolina.

Passerines

Tyrant Flycatchers (Family Tyrannidae)

Eastern Phoebe *Sayornis phoebe*

Tennessee Aquarium

Queens Zoo

Scissor-tailed Flycatcher *Tyrannus forficatus*

Oklahoma City Zoo

Tulsa Zoo and Living Museum

Western Kingbird *Tyrannus verticalis*

Abilene Zoological Gardens

Eastern Kingbird *Tyrannus tyrannus*

Toledo Zoo

Turtle Back Zoo

Great Crested Flycatcher *Myiarchus crinitus*

Tennessee Aquarium

Oklahoma City Zoo

Shrikes (Family Laniidae)

Loggerhead Shrike *Lanius ludovicianus*

Bronx Zoo

Toronto Zoo

Smithsonian Conservation Biology Institute

Vireos (Family Vireonidae)

Red-eyed Vireo *Vireo olivaceus*

North Carolina Zoo

Tennessee Aquarium

Crows, Jays and Magpies (Family Corvidae)

Blue Jay *Cyanocitta cristata*

Audubon Aquarium of the Americas

Oklahoma City Zoo

North Carolina Zoo

Point Defiance Zoo & Aquarium

Birmingham Zoo

Living Desert State Park

Virginia Aquarium & Marine Science Center

Abilene Zoological Gardens

Dallas Zoo

Assiniboine Park Zoo

Steller's Jay *Cyanocitta stelleri*

Arizona-Sonora Desert Museum

Oregon Zoo

Moonridge Animal Park

Assiniboine Park Zoo

Pinyon Jay *Gymnorhinus cyanocephalus*

Phoenix Zoo

Green Jay *Cyanocorax yncas*

Abilene Zoological Gardens

Houston Zoo

Audubon Zoo

Zoo Miami

Yellow-billed Magpie *Pica nuttalli*

Coyote Point Museum

Los Angeles Zoo

Sacramento Zoo

Chahinkapa Zoo

Black-billed Magpie *Pica hudsonia*

Binghamton Zoo at Ross Park

Bronx Children's Zoo

ZooAmerica

Cleveland Metroparks Zoo

Utah's Hogle Zoo

Kansas City Zoo

Bronx Zoo

San Diego Zoo

SD-WAP

Woodland Park Zoo

Toronto Zoo

Fish Crow *Corvus ossifragus*

Capron Park Zoo

Bronx Children's Zoo

Brookgreen Gardens

Bronx Zoo

Central Florida Zoological Park

American Crow *Corvus brachyrhynchos*

Akron Zoological Park

North Carolina Zoo

Audubon Zoo

Moonridge Animal Park

Binghamton Zoo

Chattanooga Zoo

Brevard Zoo

Boonshoft Museum of Discovery

Palm Beach Zoo at Dreher Park

Erie Zoological Gardens

ZooAmerica

Houston Zoo

Hutchinson Zoo

John Ball Park

Knoxville Zoo

Henry Vilas Zoo

Sunset Zoo

Magnetic Hill Zoo

Nashville Zoo

Orange County Zoo

Bergen County Zoological Park

National Aviary

Project Wildlife

Children's Zoo at Celebration Square

San Francisco Zoological Gardens

Happy Hollow Zoo

Riverside Discovery Center

Silver Spring Park

St Louis Zoo

Tracy Aviary

Tulsa Zoo and Living Museum

Virginia Aquarium & Marine Science Center

Virginia Living Museum

Valley Zoo

Turtle Back Zoo

NY State Zoo

Chihuahuan Raven *Corvus cryptoleucus*

Abilene Zoological Gardens

Arizona-Sonora Desert Museum

Pueblo Zoo

Albuquerque Biological Park

Raven *Corvus corax*

Greater Vancouver Zoo

Potter Park Zoological Gardens

America's Teaching Park

Buttonwood Park Zoo

Connecticut's Beardsley Zoo

Maryland Zoo

Bowmanville Zoological Park

Knoxville Zoo

NZP-WASH

Caldwell Zoo
 Living Desert State Park
 Chehaw Wild Animal Park
 Chicago Zoological Society
 Cheyenne Mountain Zoological Park
 Coyote Point Museum
 Sequoia Park Zoo
 Fort Worth Zoo
 ZooAmerica
 Utah's Hogle Zoo
 Houston Zoo
 Indianapolis Zoo

The Living Desert Zoo
 Philadelphia Zoo
 Phoenix Zoo
 Project Wildlife
 Roger William Park Zoo
 Santa Barbara Zoological Gardens
 Point Defiance Zoo and Aquarium
 Florida Aquarium
 Turtle Back Zoo
 NY State Zoo
 Natural History Museum of Adirondacks
 Willow Park Zoo

Larks (Family Alaudidae)

Horned Lark (Shore Lark) *Eremophila alpestris*
 North Carolina Zoo

Swallows (Family Hirundinidae)

Cliff Swallow *Petrochelidon pyrrhonota*
 Project Wildlife

Titmice (Family Paridae)

Tufted Titmouse *Baeolophus bicolor*

Tennessee Aquarium
 Columbus Zoo and Aquarium

South Carolina Zoo
 Virginia Aquarium & Marine Science Center

Carolina Chickadee *Poecile carolinensis*

Tennessee Aquarium

Columbus Zoo and Aquarium

Verdin (Family Remizidae)

Verdin *Auriparus flaviceps*

Arizona-Sonora Desert Museum

Nuthatches (Family Sittidae)

White-breasted Nuthatch *Sitta carolinensis*

Tennessee Aquarium

Minnesota Zoological Garden

Wrens (Family Troglodytes)

House Wren *Troglodytes aedon*

Tennessee Aquarium

Carolina Wren *Thryothorus ludovicianus*

Virginia Aquarium & Marine Science Center

Cactus Wren *Campylorhynchus brunneicapillus*

Arizona-Sonora Desert Museum

Thrushes (Family Turdidae)

Eastern Bluebird *Sialia sialis*

Tennessee Aquarium
 Columbus Zoo and Aquarium
 Cosley Zoo
 Houston Zoo
 Hutchinson Zoo

Minnesota Zoological Garden
 South Carolina Aquarium
 St Louis Zoo
 Toronto Zoo

Western Bluebird *Sialia mexicana*

Tracy Aviary

Mountain Bluebird *Sialia currucoides*

Denver Zoo

Wood Thrush *Hylocichla mustelina*

Tennessee Aquarium

Swainson's Thrush *Catharus ustulatus*

Tennessee Aquarium

Columbus Zoo and Aquarium

Hermit Thrush *Catharus guttatus*

Arizona-Sonora Desert Museum

North Carolina Zoo

Biodome de Montreal

Tennessee Aquarium

Cosley Zoo

American Robin *Turdus migratorius*

Abilene Zoological Gardens

Knoxville Zoo

Columbus Zoo and Aquarium

NY Bronx

Cosley Zoo

National Aviary

Coyote Point Museum

South Carolina Aquarium

Dallas Zoo

Florida Aquarium

Queens Zoo

Toledo Zoo

Fort Worth Zoo

Mockingbirds, Thrashers (Family Mimidae)**Grey Catbird *Dumetella carolinensis***

Biodome de Montreal

Tennessee Aquarium

South Carolina Aquarium

Columbus Zoo and Aquarium

Florida Aquarium

Boonshoft Museum of Discovery

Virginia Aquarium & Museum Center

Queens Zoo

Knoxville Zoo

Virginia Living Museum

Northern Mockingbird *Mimus polyglottos*

El Paso Zoo

The Living Desert

Fort Worth Zoo

Tracy Aviary

Oklahoma City Zoological Park

Brown Thrasher *Toxostoma rufum*

Tennessee Aquarium

Virginia Living Museum

Oklahoma Living Museum

Curve-billed Thrasher *Toxostoma curvirostre*

Arizona-Sonora Desert Museum

Living Desert State Park

Chicago Zoological Society

The Living Desert

California Thrasher *Toxostoma redivivum*

Coyote Point Museum

Waxwings (Family Bombycillidae)**Cedar Waxwing *Bombycilla cedrorum***

Biodome de Montreal

Knoxville Zoo

Tennessee Aquarium

Minnesota Zoological Park

Columbus Zoo and Aquarium

Philadelphia Zoo

Coyote Point Museum
 Sequoia Park Zoo
 Fort Worth Zoo

Tulsa Zoo and Living Museum
 Assiniboine Zoo
 Bronx Children Zoo

New World Warblers (Family Parulidae)

Tennessee Warbler *Vermivora peregrina*
 Columbus Zoo and Aquarium

Chestnut-sided Warbler *Dendroica pensylvanica*
 Biodome de Montreal

Black-throated Blue Warbler *Dendroica caerulescens*
 Biodome de Montreal Tennessee Aquarium

Yellow-rumped Warbler *Dendroica coronata*
 North Carolina Zoo Columbus Zoo and Aquarium
 Biodome de Montreal Virginia Aquarium & Marine Science Center
 Tennessee Aquarium

Magnolia Warbler *Dendroica magnolia*
 Tennessee Aquarium

Palm Warbler *Dendroica palmarum*
 Columbus Zoo and Aquarium

Yellow Warbler *Dendroica petechia*
 Tracy Aviary

Pine Warbler *Dendroica pinus*
 Tennessee Aquarium

Wilson's Warbler *Wilsonia pusilla*
 Columbus Zoo and Aquarium

Ovenbird *Seiurus aurocapillus*
 Tennessee Aquarium Columbus Zoo and Aquarium

Common Yellowthroat *Geothlypis trichas*
 Biodome de Montreal South Carolina Aquarium
 Tennessee Aquarium

Yellow-breasted Chat *Icteria virens*
 Tennessee Aquarium

American Redstart *Setophaga ruticilla*
 Biodome de Montreal

Tanagers (Family Thraupidae)

Summer Tanager *Piranga rubra*
 North Carolina Zoo Tulsa Zoo and Living Museum

Scarlet Tanager *Piranga olivacea*
 Tennessee Aquarium National Aquarium

Western Tanager *Piranga ludoviciana*
 Arizona-Sonora Desert Museum Reid Park Zoo
 Coyote Point Museum

Towhees, Sparrows and Juncos (Family Emberizidae)**Abert's Towhee** *Pipilo aberti*

North Carolina Zoo

Eastern Towhee *Pipilo erythrophthalmus*

Tennessee Aquarium

Knoxville Zoo

Columbus Zoo and Aquarium

South Carolina Aquarium

Brown Towhee *Pipilo fuscus*

Omaha's Henry Doorly Zoo

Chipping Sparrow *Spizella passerina*

Tennessee Aquarium

Fox Sparrow *Passerella iliaca*

Columbus Zoo and Aquarium

Song Sparrow *Melospiza melodia*

Tennessee Aquarium

Queens Zoo

Columbus Zoo and Aquarium

Minnesota Zoological Park

Harris' Sparrow *Zonotrichia querula*

Columbus Zoo and Aquarium

White-crowned Sparrow *Zonotrichia leucophrys*

Abilene Zoological Park

Coyote Point Museum

White-throated Sparrow *Zonotrichia albicollis*

Biodome de Montreal

Columbus Zoo and Aquarium

Tulsa Zoo and Living Museum

Queens Zoo

Slate-colored Junco *Junco hyemalis*

Tennessee Aquarium

Turtle Back Zoo

Columbus Zoo and Aquarium

Queens Zoo

Virginia Aquarium & Marine Science Center

Cardinals, Grosbeaks and Buntings (Family Cardinalidae)**Northern Cardinal** *Cardinalis cardinalis*

Audubon Aquarium of the Americas

Utah's Hogle Zoo

North Carolina Zoo

Houston Zoo

Central Park

Tennessee Aquarium

South Carolina Aquarium

Chicago Zoological Society

Toledo Zoo

Columbus Zoo and Aquarium

Virginia Aquarium & Marine Science Center

Cosley Zoo

Buttonwood Park Zoo

Queens Zoo

Abilene Zoological Gardens

Oklahoma City Zoo

Pyrrhuloxia *Cardinalis sinuatus*

Arizona-Sonora Desert Museum

Living Desert State Park

North Carolina Zoo

Black-headed Grosbeak *Pheucticus melanocephalus*

Arizona-Sonora Desert Museum

Tracy Aviary

Sequoia Park Zoo

The Living Desert

Rose-breasted Grosbeak *Pheucticus ludovicianus*

Akron Zoological Park

Biodome de Montreal

Tennessee Aquarium

Columbus Zoo and Aquarium

Knoxville Zoo

Minnesota Zoological Park

Montgomery Zoo

Assiniboine Park Zoo

Tulsa Zoo and Living Museum

Indigo Bunting *Passerina cyanea*

Tennessee Aquarium

Columbus Zoo and Aquarium

Painted Bunting *Passerina ciris*

Fort Worth Zoo

The Living Desert

New World Blackbirds, Grackles and Orioles, etc. (Family Icteridae)**Eastern Meadowlark *Sturnella magna***

Columbus Zoo and Aquarium

Western Meadowlark *Sturnella neglecta*

Denver Zoo

Red-winged Blackbird *Agelaius phoeniceus*

Columbus Zoo and Aquarium

Tracy Aviary

Florida Aquarium

Common Grackle *Quiscalus quiscula*

Akron Zoological Park

Queens Zoo

Central Park

National Aviary

Boat-tailed Grackle *Quiscalus major*

Palm Beach Zoo

Great-tailed Grackle *Quiscalus mexicanus*

Arizona-Sonora Desert Museum

The Living Desert

Brewer's Blackbird *Euphagus cyanocephalus*

Tracy Aviary

Brown-headed Cowbird *Molothrus ater*

Columbus Zoo and Aquarium

Hooded Oriole *Icterus cucullatus*

Omaha's Henry Doorly Zoological Gardens

Northern Oriole *Icterus galbula*

Biodome de Montreal

Minnesota Zoological Park

Birmingham Zoo

Florida Aquarium

Cosley Zoo

Toledo Zoo

Fort Worth Zoo

Assiniboine Park Zoo

Orchard Oriole *Icterus spurius*

Tennessee Aquarium

National Aviary

Scott's Oriole *Icterus parisorum*

Omaha's Henry Doorly Zoological Gardens

Spot-breasted Oriole *Icterus pectoralis*

MetroZoo

Finches (Family Fringillidae)**Purple Finch** *Carpodacus purpureus*

National Aviary

Cassin's Finch *Carpodacus cassinii*

Tracy Aviary

Pine Grosbeak *Pinicola enucleator*

Calgary Zoo

Pine Siskin *Carduelis pinus*

Biodome de Montreal

Lesser Goldfinch *Carduelis psaltria*

North Carolina Zoo

Tracy Aviary

American Goldfinch *Carduelis tristis*

Biodome de Montreal

Columbus Zoo and Aquarium

Calgary Zoo

Toledo Zoo

Tennessee Aquarium

Virginia Aquarium & Marine Science Center

House Finch *Carpodacus mexicanus*

North Carolina Zoo

Phoenix Zoo

Coyote Point Museum

Project WILDs

Fort Worth Zoo

Toledo Zoo

Utah's Hogle Zoo

Turtle Back Zoo

The Living Desert

Evening Grosbeak *Coccothraustes vespertinus*

Columbus Zoo and Aquarium

El Paso Zoo

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The following reminiscences were published originally in Foreign Birds in 2007 - 2009. Bernard had just passed his fiftieth consecutive year in active aviculture and, in that time had met and, in many cases, become longstanding friends with many of the luminaries and great characters of the period and in these reminiscences recalls some of the events and individuals that left lasting impressions on him.

HAVING BEEN AN AVICULTURIST FOR FIFTY YEARS

Part 1

by Bernard Sayers

My parents were always somewhat puzzled, not to say distraught, by my deep interest in natural history because no other member of the family had the slightest interest in it. Indeed my father seemed to provoke a violent response from the meekest of creatures and I frequently warned him against becoming a lion tamer because I doubted he would survive to his first coffee break. My mother had an antipathy to anything with fur or feathers and could touch neither and my sister regarded all animals as being smelly and noisy. It was therefore fortunate indeed that a local butcher and his wife, Cliff and Win Palmer, took me under their wings. This delightful couple had no children of their own and became like second parents to me. Even better Cliff owned a car, which was something of a rarity in those days and enabled us to visit collections of interest.

When I met Cliff and Win they bred exhibition budgerigars and also bred and trained German Shepherd dogs. Cliff never lost interest in his budgerigars, but under my influence we started to keep and breed pheasants. Cliff converted some of his dog runs into pheasant pens and built another row of pens on the opposite side of his large garden. I, in turn, worked during the school holidays and at weekends to earn enough money to build as many pens as my parents would (under protest) allow me to have in the garden of our home in Chelmsford.

The range of species available had been sadly depleted during the Second World War and up until that time very little new stock had been imported. Our first acquisition, like that of so many pheasant breeders, was a pair of Golden Pheasants *Chrysolophus pictus*. The pair was bought from local farmer, Alf Ashby, who became a good friend. Alf farmed at Smallands Hall, which although only a few miles (kilometres) from Chelmsford, was surprisingly isolated. Indeed from Alf's farm hardly any other houses were visible. This enabled Alf to keep and breed many species at liberty. He had

free-flying Ravens *Corvus corax*, African Grey Parrots *Psittacus erithacus*, peafowl *Pavo* sp. and a homing flock of Quaker (Monk) Parakeets *Myiopsitta monachus* which returned to their aviary each evening, after spending the day foraging around Alf's stack yard and orchard. Alf was though a real countryman and his main interest was in keeping British and European species. He had a huge aviary and several smaller aviaries stocked with some wonderful finches and softbills. There were also a few other aviaries for owls, kestrels and crows.

The Golden Pheasants had been parent-reared in the very big aviary and were just moulting into adult plumage. Alf caught and boxed a female and then caught a male which he stood holding whilst he had a long conversation with us. Pheasants always shed feathers easily and even more so during the moult. As he talked Alf kept stroking the cock pheasant and each time he did so another tuft of feathers became detached. As the conversation proceeded I became increasingly convinced that rather than introducing a bird of great beauty into our aviary we would release an oven-ready wreck in need of a woolly jacket.

When the cock pheasant completed the moult and was in full colour it was obvious that it was not a pure-bred bird and no doubt had some Lady Amherst's Pheasant *C. amherstiae* blood in its ancestry. Indeed, until new pure-bred birds were imported from China relatively recently all of the Golden and Lady Amherst's Pheasants in the UK were, to some extent, hybrid stock. Anyhow, because the pheasants bought from Alf were brother and sister and showed such obvious signs of hybridisation they were soon replaced with an unrelated pair which at least looked authentic.

In the ensuing years Alf was a generous friend who provided bags of wild seed for our growing collection, hollow logs as nests for my parrots and also introduced us to keeping British finches. Even more importantly Alf started me on 45 years of keeping and breeding owls. Alf's relatives ran Blackwater Timbers which cropped and processed local timber. One day a tree felling gang cut down an Elm *Ulmus* sp. not realising that it contained the nest of a pair of Tawny Owls *Strix aluco*. As the tree began to topple an adult flew out of the nest and when it hit to the ground two chicks were found in the hollow. They were both alive, but were obviously injured. One died that night, but the other chick survived in spite of a damaged wing which left it with limited ability to fly for the rest of its life. I had persuaded my father to help me rescue the two owl chicks and the survivor, which was named Hibou, was my first owl. In those days well before surgical and DNA sexing it was thought to be a male and was paired with a larger bird which was believed to be a female.

They did indeed prove to be a true pair and went on to be the most

successful pair of birds I have ever looked after of any species. Tawny Owls normally lay two or three eggs in a clutch, but Hibou's mate always laid four eggs and every egg was fertile and every chick - a total of 56 in 14 years - was reared. No other bird in my collection has ever come close to equalling this record.

Alf was an accomplished raconteur who had a fleeting acquaintance with scientific and technical terms and, without doubt, became the Stanley Unwin (famous for speaking gobbledegook) of the Cage Bird Society speaking circuit. He would begin with his personal observations which were fine, but then getting into his stride he would launch into the world of exotic species and science, whereupon accuracy and fact became early casualties. I heard botanic and horticultural terms and diseases attributed to birds and vice versa, countries of origin were continents awry and birds' relationships shamelessly reclassified. It was all good humoured and entertaining though and Alf never failed to hold his audiences spellbound.

Leaving a meeting with some friends who were expressing their admiration for Alf's great knowledge, I asked them if they understood any of it and they had to admit that it was way over their heads and, so it was, because much of it was absolute moonshine. Alf Ashby was a generous friend for many years and, without doubt, a great character, but I did not take his discourses too seriously and I do not think he intended I should. I was privileged to have known him.

When Cliff and I began keeping pheasants a regular advertiser in *Cage Birds* (later to become *Cage & Aviary Birds*) was Roger Willett. After phoning and arranging to visit him we headed in Cliff's Ford Anglia car for Ipswich where Roger lived. Roger was an elderly gentleman who was semi-retired. He had been a Suffolk farmer and then built up a chain of grocery stores. Named the Worthmore Stores the chain was a kind of early forerunner to Tesco Express and sought to provide customers with excellent value for their money. Roger and his wife worked hard and, had done well enough, but would have become seriously wealthy if they had not been by nature such a generous couple.

After retiring from farming and retailing, Roger and his wife bought Whitton Lodge on the outskirts of Ipswich. It was a big old building with numerous outbuildings and several acres (hectares) of wooded grounds. In semi-retirement Roger took a keen interest in genealogy and kept and bred pedigree poultry, gamebirds and waterfowl. However, his interest gained a new dimension when several very large breeders including the legendary Oliver Squires (more about whom later) retained Roger to buy and sell most of their stock. This came about because Roger was the fairest and most honest man one could ever find and everyone involved with him had total

respect and trust in him.

Early acquisitions from Roger were a pair of Blue Eared-Pheasants *Crossoptilon auritum* and a pair of Reeves's Pheasants *Syrnaticus reevesii*. The Blue Eared-Pheasant was the only one of the *Crossoptilon* spp. then available. It was, of course, long before Jersey Zoo received its White Eared-Pheasants *C. crossoptilon* from which a great many young were bred. Although a few Brown Eared-Pheasants *C. mantchuricum* were available all were descended from a single pair imported about a century before and thus hopelessly inbred and infertile. New stock has now been imported from China which has improved the situation.

The Blue Eared-Pheasants settled very well and were great favourites of mine because unlike many pheasants, which can be nervous and volatile in aviaries, they are naturally tame and placid. The pair bred very well and we reared many youngsters, but alas the pair was very noisy which left our neighbours less than impressed. Therefore, after a couple of years I had to transfer the pair to Cliff's garden as his neighbours were farther away.

The Reeves's Pheasants were bought as youngsters and as they matured the cock grew into a magnificent specimen. He was huge and beautifully marked and had a 5ft (approx. 1.5m) long tail which was silver in colour with black lateral bars. He was not noisy, but by golly he was aggressive and was accordingly named Satan. It quickly became apparent that a single hen stood no chance with him and would soon have been killed, so a further four hens were quickly acquired. This worked wonderfully because if he chased a hen with vicious intent she was quickly lost in the crowd and no real harm was done.

Satan was certainly a red-blooded male and the five hens produced a great many eggs and most of those we incubated were fertile. However, if we had set all of the eggs we would have been knee-deep in Reeves's Pheasants, so we ate the majority of them. Satan hated me and gave me a rough time. When he saw I was about to enter the aviary he would jump onto the highest perch in the hope that he could drop onto my back and rake me with his spurs. Usually I was ready for him, but occasionally he won what for me was a very painful encounter. On one occasion, I had successfully warded him off and as I was backing out of the aviary door he saw his opportunity and flew at me. I ducked and he sailed over my head and was loose in the garden. He walked around somewhat bewildered for a time and I quietly shepherded him to where two blocks of aviaries formed a right angle in the hope that, once he was in the corner, I could grab him. I cornered him, but as I went to grab him he burst vertically into the air and kept rising until he was just a dot in the heavens. I thought I had lost him for ever, but in the forlorn hope he might turn up I phoned the police and the local RSPCA

inspector. Miraculously, a couple of days later the inspector phoned to tell me that a gentleman living not too far away had managed to entice, what he called a "pretty chicken" into his garage and wondered if it might be Satan. I lost no time in getting there and, sure enough, there was Satan shut in the man's garage - but with his tail neatly cut off about 12in (30cm) from his body. Apparently, his captor had gone into his garden where Satan was tucked away under a privet hedge with only his magnificent 5ft (approx. 1.5m) long tail protruding across the lawn. Seeing the lateral black bars the man convinced himself that it was an Adder *Vipera berus* - although it would have been the mightiest Adder ever recorded - and fetched his spade and cropped the 'snake' in half. He must have felt extremely foolish but redeemed himself by laying a trail of bread across the lawn to the back door of his garage where he finally trapped Satan.

In the early years following the opening of Jersey Zoo, Roger Willett supplied the zoo with waterfowl, etc. and disposed of the zoo's surplus stock. At the time the zoo was breeding Red-billed Francolins *Francolinus adspersus* and sent some young to Roger. In addition, Roger had received some Erckel's Francolins *F. erckelii* from another source. I found them very attractive and asked if I could buy a pair of each of them. Roger liked them too and had decided to keep them, but said that if he managed to breed them he would remember me. He subsequently bred these francolins and, true to his word, remembered my interest and offered me a pair of each. These two species remain the only francolins I have kept or bred. Both could be prolific breeders and very long-lived, I can remember a pair of Erckel's in the collection of my friend Gary Robbins which seemed to live for ever and continued to breed when they were distinctly elderly.

I have always been fond of shelducks and sheldgeese - the Andean *Chloephaga melanoptera*, Magellan *C. picta* and Ashy-headed *C. poliocephala*, etc. They are all beautifully marked, invariably look immaculate and whereas some waterfowl are inclined to be timid and retiring, shelducks and sheldgeese always look self-assured. A lot of waterfowl keepers do not like them because they can prove aggressive in mixed collections. This is quite true although the species do vary in this respect. The Ashy-headed and Ruddy-headed *C. rubidiceps* are not too bad whilst the real bruiser is the large and powerful Cereopsis or Cape Barren Goose *Cereopsis novaehollandiae*. A gander of the latter species with an incubating female or goslings to defend will make a fair attempt to virtually kill anything, including his keeper, if given half a chance.

On one of my visits to Roger he had a nice batch of young Ruddy Shelducks *Tadorna ferruginea* which I fell in love with and agreed to buy a pair for £10 (approx. US\$15). The pair settled in very well at liberty in

our garden and spent most of their time grazing on the lawn. Although shelducks and sheldgeese do swim and my birds have access to a pool they seem to spend most of their time on the lawn. My pair had the usual ration of pellets and mixed corn, but soon learnt to stand outside the kitchen door braying until they were given some titbits such as cubes of brown bread, crumbled digestive biscuits or even cooked vegetables. It took my pair of shelducks three years to reach maturity and they were very little trouble in that time. They did very little damage in the garden and although they made rather a mess on the lawn in dry weather, a few minutes with a rake and hose soon rectified this. Moreover, they were not particularly noisy and with their orange/brown 'suede' plumage looked magnificent on the lawn in the sun. In their third year it was obvious that they wanted to breed. They restlessly searched the garden (for a nest site I assumed) and the drake became rather aggressive and charged at anyone who entered the garden, but always veered off before he made contact. I placed a grandfather clock nest box I had constructed for my macaws on its side under a huge Fatsia and stuffed half a bale of hay into it. Reasoning that shelducks are burrow nesters I thought it would suffice and so it did. In a few hours the shelducks were defending it vigorously. Soon the duck's ventral area became distended and it was obvious she was laying. Ducks, of course, do not commence incubation until the last egg has been laid, so it was a couple of weeks or so before she disappeared. Even during incubation she spent surprisingly long periods on the lawn with the drake. During one of these absences I opened the door of the nest box to check inside and found a lovely down-lined nest containing nine eggs. The down lining had a sort of flap, which had been pulled over the eggs and this kept them perfectly warm during the duck's off duty periods. Using a rolled up magazine and the sun I candled one of the eggs and was fairly sure it was fertile.

The duck continued to incubate the eggs until one evening I returned home from work to discover that nine ducklings had hatched. Shelduck ducklings are adorable little creatures and I was thrilled with the family group. As the ducklings grew bigger, however, the garden quickly turned into a muddy mess and to say my parents were disenchanted puts it mildly.

I made a perfectly good job of pinioning the ducklings. However, the other wing gradually drooped lower and lower, I sought advice from Bill Bolton a very experienced local breeder of waterfowl who had the answer immediately. I had fed the ducklings too rich a diet, which caused the primaries to grow quicker than the muscles had developed to support them. Obviously I needed to change the diet immediately and put a plaster of paris bandage around the drooped wings to keep them in the correct position. Thanks to Bill's help and advice all nine ducklings - six ducks and three

drakes - grew into lovely birds with no sign of wing defects. Roger Willett seemed almost as pleased as me by the success and offered to buy all nine youngsters for £4 (approx. US\$6) each, I would have been satisfied with less and told Roger so, but he said the females would sell quickly and he was pleased to be able to help me with my collection. Few dealers would have been so generous and, to be fair, few could have afforded to. As the following breeding season approached my parents applied increased pressure on me to dispose of the pair of Ruddy Shelducks because they could not bear the thought of the garden being turned into such a mess again. With great reluctance, I returned the pair to Roger and came away with a pair each of Laysan Teal *Anas laysanensis*, Carolina Aix *sponsa* and Mandarin Ducks *A. galericulata*. They graced the garden for many years and being much smaller never caused any problems even when they had young.

Roger often said that although birds fascinated him it was the personalities who kept them which really interested him. He would gossip for hours about the many individuals he had met through his activities, but he was never bitchy or condescending about anyone even those who had treated him badly. Roger's conversation was always good natured and he had a lovely gentle sense of humour. I miss breaking my trips to Norfolk and Suffolk to call at Roger's for a cup of tea and a chat now that he is no longer with us. Incidentally, towards the end of Roger's time as a dealer, a schoolboy was often there at weekends helping care for the birds. That schoolboy was Trevor Lay who went on to become one of the biggest waterfowl breeders and dealers in this country and I will write more about him later.

During my early membership of the Avicultural Society it used to have a dining club (the British Aviculturists' Club) which met at the Windsor Hotel at Lancaster Gate. It was the tradition that overseas members of the society who found themselves in London at the appropriate time would attend these dinners and it was at one of these evenings that I met the Australian Joe Forshaw. It must have been in the late 1960s or even the early 1970s and he had brought with him a mock up of part of a book he was working on which included a specimen plate of the Hyacinth Macaw *Anodorhynchus hyacinthinus* painted by William Cooper. This would eventually become the monograph *Parrots of the World*. I had always been interested in books on natural history and already had a modest library. In the library at London Zoo I had seen some of the wonderful ornithological monographs with lovely hand coloured plates, but although these were offered for sale occasionally by dealers and at auctions, they were far too expensive for my pocket. However, *Parrots of the World* was the next best thing, with its well researched text and lovely plates, which were of course printed, rather than hand coloured. The projected price of £35 (approx. US\$50 at the current exchange rate)

was a lot of money at the time, but was just about affordable. I was hooked and this started a lifelong passion for collecting books on natural history. My library now has in excess of 8,500 volumes and dominates every room in the house with bookcases from floor to ceiling. It has even prompted three extensions to the house. The other interest stimulated by Joe Forshaw, although he did so unwittingly, is collecting the failed eggs of captive birds and assembling them into a reference resource.

When *Parrots of the World*, was published I was quick to buy a copy and read it avidly. The text brought together all the information available, but for species after species I noticed that the egg remained undescribed. How could this be I thought when many of these species had been bred in captivity, some on numerous occasions. Then the realisation dawned that eggs laid by captive birds were rarely described and if they failed to hatch they were usually thrown into the bin. Clearly aviculture as a source of reference material should be tapped, but how should this be done? At the time I sat on the council of the Avicultural Society on which a fellow council member was Dr Colin Harrison, who was a senior member of staff in the Department of Ornithology at the British Museum (Natural History) with special responsibility for the Oological (eggs) Department. I explained to Colin what a rich source of reference material aviculture was and suggested that the museum made use of it. Colin thought it was a good idea, but explained that the museum only had a small number of staff and he doubted it would have time to collect and blow eggs from UK zoos, bird gardens and private collections. Also, many of the eggs would be addled or contain well developed chicks and therefore he did not think that blowing them would be a popular job at the museum. Upon reflection, I thought if the museum was unable to tap this resource other museums would foresee similar difficulties so, on the basis one should never suggest to others what one is unprepared to do oneself, only one option remained - I would start my own collection. That was in 1972 since when thanks to the generous support received from a huge number of collections my egg collection now extends to more than 60,000 eggs representing over 2,000 species and subspecies.

Initially progress was quite slow, but once friends and contacts realised I was serious and really would drive long distances to collect putrid, stinking eggs, the response was magnificent. At the peak of my collecting activity I was collecting and blowing 5,000 eggs a year and taking into account that the main breeding season spans only three or four months the demands on my time and stamina were enormous. Some nights I did not go to bed but worked through until 6.00am blowing eggs and then had a shower, shaved and changed, before setting off for work. Although the effort and costs involved in collecting the eggs has been considerable I have enjoyed it all

immensely.

My collection is now quite important and I am very proud of it, especially as not a single viable egg was destroyed in creating it. Indeed I can honestly say that I have never taken a wild bird's egg not even when I was a boy. It has always been my view that a blown eggshell is a poor exchange for a bird which would otherwise have hatched. However, if the equation is that the egg having failed to hatch would have been thrown in the bin, then I think it is important to preserve it. I think I began this project in the nick of time, because with the ban on the importation of wild birds into the EU (European Union) now in place, the range of species laying eggs in UK collections has reduced dramatically. Many species have laid in UK aviaries occasionally, but not sufficiently regularly to establish permanent self-sustaining-populations. This is particularly true of many species of softbills and the more demanding seedeaters.

John Spedan Lewis (who was a Vice President of the Avicultural Society from 1938-1962) inherited the John Lewis store chain from his father and made all the staff partners in the business and gave them a share of the profits. A leading aviculturist in the period between the two World Wars, John Spedan Lewis established wonderful collections at Cookham and Wargrave by the Thames in Berkshire. The birds in these collections ranged from macaws to birds-of-paradise and over 100 owls. According to contemporary accounts his owl collection at Wargrave was almost certainly the largest of its kind in the world at the time. Unfortunately for me this collection was in being before my time and I never had the pleasure of seeing it. Later John Spedan Lewis moved to Leckford Abbas in the Test Valley, near Stockbridge in Hampshire and built up a further collection of pheasants, waterfowl, cranes and owls, etc., about which I will have more to say later. He had an impressive record of keeping and breeding owls and I believe those which nested in his aviaries included the Indian Barn Owl *Tyto alba stertens*, a subspecies of the Collared Scops Owl *Otus bakkamoena semitorques* or what Clements (2007) lists as the Japanese Scops Owl *O. semitorques* (which was then called the Half-collared Scops Owl and, although it was said to "have nested", I can find nothing to indicate that any youngsters were reared), the White-faced Owl *Philopsis leucotis* or *P. granti* (split into two species now but formerly, of course, well-known as the White-faced Scops Owl *O. leucotis*), European Eagle-Owl *Bubo bubo*, Greyish Eagle-Owl *B. cinerascens* (previously called the Abyssinian Eagle-Owl and regarded as a subspecies of the Spotted Eagle-Owl *B. africanus*), Great Horned Owl *B. virginianus*, Burrowing Owl *Athene cunicularia nanodes* and Spectacled Owl *Pulsatrix perspicillata*.

A rather formidable lady, Miss Ethel Chawner (who edited the *Avicultural Magazine* for part of 1935 and from 1936-1938), kept a private collection

of owls at her home at Lyndhurst in the New Forest in the early part of the twentieth century. She clearly knew what she was doing because she successfully bred such species as the Andean Pygmy Owl *Glaucidium jardinii*, known then as Jardine's Pygmy Owl, and the White-faced (Scops) Owl, both for the first time in the UK, in 1915 and 1923 respectively. In 1927, John Spedan Lewis engaged Miss Chawner to take charge of his collections at Cookham and Wargrave and, when he moved to Leckford, Miss Chawner was mainly responsible for the formation of the Leckford collection. She remained in charge until her retirement in 1939.

Although owls are easily managed birds in captivity, being long-lived, ready breeders, hardy and easy to feed, such impressive results were by no means the norm at the time. Many collections, including some of the prominent zoos, fared poorly with their owls - photographs taken at the time show birds in very poor conditions.

Initially, this puzzled me because stockmanship in the nineteenth and early twentieth centuries was often excellent and many species of birds which are a great deal more demanding than owls did very well when kept in aviaries. However, having read accounts written at the time and talked to those who were involved in aviculture during the early twentieth century I believe I now understand the reasons why.

Firstly, some keepers reasoned that as owls are nocturnal they should be kept in dark aviaries often facing north and/or in the dense shade of trees. This was and remains totally wrong. Certainly owls need a shady corner and a roosting/nesting box into which they can retire at will. However, owls also love to sunbathe and on sunny days I often see my birds on the ground with their wings outstretched as they soak up the sunshine. The second mistaken belief was that owls did not need water because they obtained enough moisture in the form of blood from their food. It is true that owls can survive without water, but they should never be denied access to it. Owls certainly drink water, particularly during hot weather. Also, most owls are regular and enthusiastic bathers and this helps keep their plumage in good order. The third aspect of this inadequate husbandry was a poor diet. Some owls particularly those kept by wealthy landowners were fed by the gamekeepers on rabbits, rats, mice and sparrows, etc. caught on the estate. This certainly applied at Wargrave and the results were fine. However, other keepers advocated a diet of chicken heads and butchers' scraps and whilst this kept the owls alive they usually failed to prosper and breed on such an inadequate diet. The final problem was air pollution. Owls were often badly affected by winter smogs. The fog, laden with smoke, badly stained their plumage and, particularly if they were kept without access to water, they were unable to bathe and wash it off. I believe these to be the

reasons why some collections failed to do as well as they might have done with their owls around a century ago.

Fortunately I had many opportunities to visit the Leckford collection, which although impressive, was past its heyday by the time I did so. At the time Cliff and I were assembling our pheasant collection much of the Leckford stock was being sold off. According to Delacour the collection was at its peak in 1939 when war was declared. Although the collection was kept going throughout the war, the resultant problems of shortages of labour, foodstuffs and the unavailability of new stock caused a considerable decrease in the size of the collection. Our first visit was memorable for several reasons, not least because it was before the construction of motorways and the journey took forever. The route took us around the infamous North Circular Road in London and through every town and village between here and Leckford. Having left home at some ungodly hour, we did not reach Leckford until late lunchtime. Once there though what a revelation Leckford was. There was the wonderful old historic house surrounded by lovely gardens full of rare plants. Huge, grass floored aviaries contained remnants of what had obviously been a vast collection of avian treasures. There were still many rare species of pheasants, parakeets and pigeons I had never seen before and could not identify. With some disappointment we realised that none of the pheasants were suitable for our collection. Either they needed much bigger aviaries than we could offer, were not hardy and needed a warm shelter, were odd birds which we stood little chance of finding mates for or were old and probably past breeding age. However, the arduous trip was not wasted because Cliff and I were mightily impressed with what we saw and came away with a young pair of Wonga Pigeons *Leucosarcia melanoleuca*.

I have not yet mentioned the vast collection of waterfowl at Leckford. Long after the rest of the bird collection had been disbanded the waterfowl were retained as a commercial breeding operation by the John Lewis Partnership. The extensive waterfowl enclosures were situated away from the Leckford Abbas mansion on the other side of the road. They spread along the banks of the River Test in an idyllic setting beyond which were lightly wooden slopes. I am no angler but I am told that the Test is one of the finest trout rivers in the south of England and the crystal clear water is full of fish fry and invertebrates. It was this water which was diverted so that it flowed briskly through the breeding and rearing enclosures. I have seen many waterfowl collections, some of them highly successful, where the lasting memories were of copious mud and water which looked like brown windsor soup, but smelt much less appetizing. Leckford was as far removed from this as one could possibly imagine. During every one of my visits the grass was always luxuriant and clean and the water always appeared clean

enough to drink.

The husbandry at Leckford was also excellent and I was intrigued by the great attention to detail. For instance, all of the perimeter fences of the enclosures had a skirting of small mesh wire-netting and fixed to the top of it was a rolled metal overhang. This was, of course, to preclude the entry of rats *Rattus* spp., Stoats *Mustela erminea* and Weasels *M. nivalis*. As one would expect in such an excellent collection, Leckford's breeding results were outstanding. Leckford was the first collection in the UK to breed Eyton's or the Plumed Whistling Duck *Dendrocygna eytoni*, Wandering Whistling Duck *D. arcuata*, Australian Radjah Shelduck *T. radjah rufitergum*, Abyssinian Blue-winged Goose *Cyanochen cyanoptera*, Andean Crested Duck *Lophonetta specularioides alticola*, Philippine Duck *A. luzonica*, Puna Teal *A. puna* and Southern Pochard *Netta erythrophthalma brunnea*. Although not the first collection to do so, it also bred Hartlaub's Duck *Pteronetta hartlaubii*, the male of which gets a somewhat swollen base to its bill during the breeding season, as well as breeding a large number of Ringed Teal *Callonetta leucophrys* which, at the time, was regarded as tricky.

Large numbers of young waterfowl were bred each year at Leckford and when I saw them they invariably appeared to be of superb quality. However, when these birds were bought by other waterfowl breeders they did not always perform as well as their new owners would have liked and dark rumours began to circulate that Leckford had, in some way, managed to sterilize its young stock in order to protect its markets. This was, of course, complete rubbish. The reason for this disparity in breeding success was much more obvious. It was simply that the new owners' waterfowl enclosures offered much poorer conditions than those at Leckford. If you were moved from abundant clean grass and gin clear, invertebrate enriched water, to mud and fetid brown windsor soup-like water would not your tail become a bit less bushy and your eyes less bright?

In all I met four successive managers of Leckford, although I knew only the last manager well. At the time of my first visit it was managed by Mr and Mrs Milligan and I can remember them telling us about the stock they used to have at Leckford and seem to remember them mentioning cranes and Emus *Dromaius novaehollandiae*. When this couple retired Terry Jones took over and was succeeded by Fred Rees or it may have been Fred Reece? The last manager was Tony Samways and he very kindly allowed me to have some of the unsuccessful eggs for my collection. Looking through my cabinet at the tickets giving the origins of the eggs I am often transported down memory lane.

The second part of Bernard's reminiscences of his 50 years in aviculture will be published in the next issue of the magazine.

BOOK REVIEWS

GRASSFINCHES IN AUSTRALIA

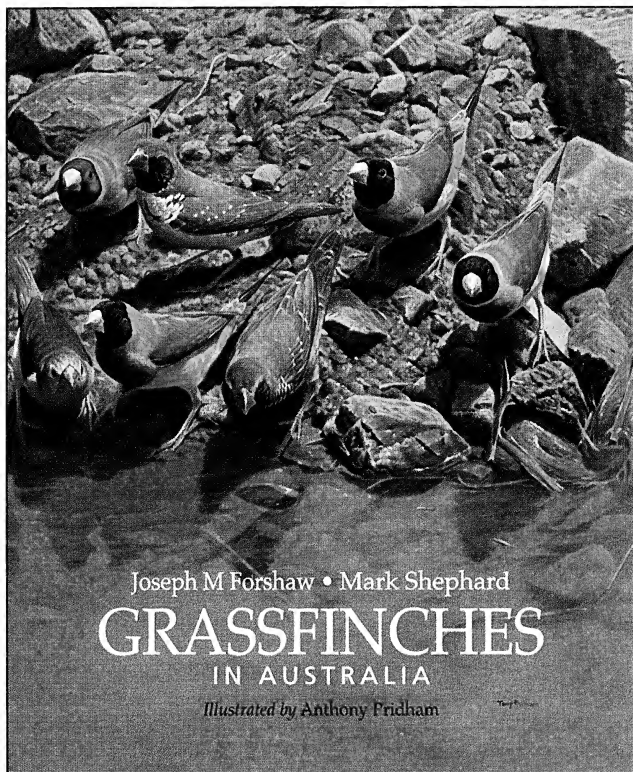
Grassfinches in Australia by Joseph M. Forshaw and Mark Shephard, illustrated by Anthony Pridham and published by CSIRO Publishing, August 2012, is described as the only up-to-date, fully illustrated monograph on all Australian species of grassfinches. It is said to be a book which will appeal to ornithologists, wildlife art book collectors and aviculturists, which summarises our present knowledge of each species and gives readers an appreciation of the birds in their natural habitats and in aviculture.

It is certainly an impressive book and will not look out of place alongside Joseph Forshaw's earlier works on parrots and birds-of-paradise. It has fewer species to cover, of course, and a different but equally outstanding artist with a markedly different style and covers keeping Australian finches in aviaries so fully that it could easily be classified as an avicultural title. It is a book every Australian finch enthusiast will aspire to own, though UK/European enthusiasts should be warned that the avicultural coverage very much concentrates on keeping and breeding these birds in aviaries in Australia and many will undoubtedly be put off by the price, which I am told will be £175.00 in the UK.¹

Joseph Forshaw begins his introduction by explaining the taxonomic arrangement used in the book, before going on to deal with the distribution and preferred habitats of the various species, their movements, social behaviour, vocalisations, feeding, courtship and nesting, the development of the young and differences in the mouth or palate markings of the nestlings. In recent years there has been a spectacular upsurge in mining activities in Australia and under the heading - Conservation - he concludes by warning that these pose a serious threat to species such as the Black-throated Finch, which has disappeared from more than 60% of its range. Habitat loss or degradation has had a severe impact on bird populations in Australia and even the ubiquitous Zebra Finch has disappeared from many coastal and subcoastal districts of eastern Australia.

Mark Shephard follows with an historical overview of Australian finches in aviculture in Australia and writes about the current status of these birds in Australian aviaries, backed up by facts and figures and the use of tables and graphs. He then tackles transport, housing and other aspects of keeping and breeding these species in Australian aviaries. A table lists common ailments, their causes, symptoms, diagnosis, treatment and prevention.

The species accounts (22 of them) begin with the Painted Finch, followed by the Beautiful and Red-eared Firetails and the Diamond Firetail or Diamond Sparrow and the various other species familiar to most of us



Joseph M Forshaw • Mark Shephard

GRASSFINCHES IN AUSTRALIA

Illustrated by Anthony Fridham

and arriving eventually at the Blue-faced Parrotfinch and Gouldian - these are followed by the Chestnut-breasted Mannikin, Yellow-rumped Mannikin, Nutmeg Finch or Spicebird (Nutmeg Mannikin is the preferred name in the book), the Pale-headed and Black-headed species, the Java Sparrow and, finally, the Pictorella Mannikin or Finch. The surprise inclusion of the Java Sparrow is because it occurs (as an introduced species) on Christmas Island (an Australian Territory in the Indian Ocean), while the Nutmeg Finch or Spicebird population of eastern Australia owes its origin to escaped and/or released cage birds. The author declares himself uncertain about the inclusion of the Black-headed Mannikin in any formal listing of Australian birds, as

no feral population has become established and has similar misgivings about the inclusion of the Pale-headed Mannikin.

The colour plates are always a highlight of such a book - and these are outstanding. Tony Pridham is an admirer of the work of Raymond Harris-Ching and I can see a strong resemblance between his work and that of Raymond Harris-Ching. *Grassfinches in Australia* is lavishly illustrated, with a full-page plate of each species and often one, two, three or more other paintings of the same species. The main plate usually shows an adult male and female and in some cases the juvenile or immature, the different subspecies where these occur and the different colour morphs in the case of the Gouldian Finch. The paintings also give a good idea of the different habitats of the various species.

Each species account concludes with up to one-and-a-half pages or more of aviary notes. Mark Shephard begins with a history of the species in aviculture, principally in Australia, but with some mention of Europe and occasionally the USA or elsewhere. He usually notes when the species was first imported into Europe - often into the UK or Germany - and when it was first bred and refers to its current status. He deals with its status in Australian aviculture under a separate heading, relying on official stock returns and other fact based data. The housing, feeding and breeding of each species are dealt with from a purely Australian point of view, though a lot of the information could equally apply here in Europe although, of course, the Australian climate enables Australians to keep and breed their birds in outdoor aviaries, whereas in Europe breeders usually keep their birds in cages indoors.

The final section covers mutations, colour variations and hybrids.

Grassfinches in Australia by Joseph M. Forshaw and Mark Shephard, illustrated by Anthony Pridham and with line drawings and text figures by Frank Knight. ISBN 9780643096349. Hardback, 336 pages, published by CSIRO Publishing, PO Box 1139, Collingwood, Victoria 3066, Australia. Website: <http://www.publish.csiro.au>/E-mail: publishing.sales@csiro.au It is distributed in the UK/Europe by Eurospan and in the USA and Canada by Stylus Publishing. Websites: <http://www.eurospanbookstore.com> & www.styluspub.com/E-mail: info@eurospangroup.com & StylusMail@PressWarehouse.com, respectively. Price A\$185.00.

Malcolm Ellis

¹ Since writing the above review, I have learned from Graeme Hyde, former long-time Editor of *Australian Aviculture*, that *Grassfinches in Australia* is available in the UK at the discounted price of £148, post free, if ordered online at: <http://www.eurospanbookstore/grassfinches-in-australia.html>

PHEASANT PIGEONS AND FLAMINGOS

The *International Zoo Yearbook* Volume 46, 2012, which takes as its special subject for this year the New World primates, has in its later section on the developing zoo world, two articles about birds likely to be of interest to aviculturists. The first of these deals with the White-naped Pheasant Pigeon and covers housing, diet, breeding and general information accumulated during the 22 years this species had been kept at Barcelona Zoo.

Five pheasant pigeons 2.2.1 confiscated by the Spanish authorities arrived at the zoo in 1988. The first chick hatched in 1992, since when an amazing total of 65 chicks had been hatched. At the time of writing (the manuscript was submitted in August 2010 and revised a year later) Barcelona Zoo had 17.6 birds. Several of those hatched at the zoo had been sent to other European institutions, including Zoo Krefeld and Weltvogelpark Walsrode in Germany, Bristol Zoo Gardens and Chester Zoo here in the UK, Zoobotanico Jerez in Spain, Copenhagen Zoo in Denmark, Jardim de Liboa in Portugal and Vogelpark Avifauna in Alphen in the Netherlands. These have contributed greatly to the European population which at the time the article was written comprised 26.12.4 birds in nine zoos, plus 3.2 in zoos in the USA. A European Studbook managed by Weltvogelpark Walsrode was established in 2001.

The second article describes a study the aim of which was to try to find a quick and cost-effective way of predicting the gender of adult Chilean Flamingos using biometric measurements. Three measurements - tarsus length, flat wing length and body mass - were taken from a group of 68 Chilean Flamingos of known sex at Dublin Zoo. Only the maximum tarsus length provided a useful guide to predicting their gender and was sufficient to predict the sex of over 94% of the adult birds. All those with a tarsus length of 26cm (10¼in) or more were male and all those with a tarsus length of 25.5cm (10in) or less were female.

Volume 48, due to be published in 2014, will take as its special subject - Avian Challenges.

The *International Zoo Yearbook* Volume 46 is published on behalf of The Zoological Society of London (ZSL) by Wiley-Blackwell, 9600 Garsington Road, Oxford OX4 2DQ, UK. I find the pricing structure with the different rates of tax, etc., difficult (or should this challenging?) to work out, therefore, may I suggest that for the appropriate price and ordering information you try the website: www.wileycustomerhelp.com/ask

Malcolm Ellis

THE KEN SMITH STORY

Mention the name Ken Smith to any like-minded person under 50 and you are likely to be met with a blank stare (as I was when I mentioned his name to two younger members during the society's visit to Chester Zoo), yet in the late 1950s and 1960s his name often cropped up in *News & Views* and when Russell Tofts was writing his biography of Ken Smith and enquired about articles Ken had written for the magazine, I was able to come up with an article on storks, another on the bird collection at Paignton Zoo, one on the birds at Jersey Zoo and an obituary to Herbert Whitley (the founder of Paignton Zoo).

After Ken Smith's widow, Trudy, and their daughters, Russell Tofts must be Ken Smith's biggest fan. He believes Ken never got the recognition he deserved during his lifetime and wants to put this right and prevent his name becoming completely forgotten. *Animals in the Blood: The Ken Smith Story*, described as "A Biography of Gerald Durrell's Right-Hand Man" is likely to go a long way towards achieving this.

In 1949, Ken Smith was Durrell's partner on an animal collecting expedition to what was then the British Cameroons (the subject of *The Bafut Beagles*) and the following year to what was then British Guiana (the subject of *Three Singles to Adventure*), mounted his own expedition to Sierra Leone and, in 1952, became Superintendent of Paignton Zoo and six years later left to set up Jersey Zoo while Gerald and Jacquie Durrell were off on an animal collecting trip to Argentina. On their return they were perturbed to discover that he had hastily built (and it showed) a conventional old-fashioned zoo. You will have to read the book and decide for yourself whether Durrell left behind a masterplan which Ken Smith failed to follow or whether he did the best he could with the limited amount of money available and the short time he had - the zoo (now the Durrell Wildlife Conservation Trust) opened to the public on March 26th 1959 (while the Durrells were still in South America).

Ken Smith had a three-year contract and continued to run the zoo while Gerald Durrell more-or-less remained hidden away behind the scenes, no doubt writing his books. Ken turned down the chance to manage Dudley Zoo, when Donald Risdon left to open the Tropical Bird Garden at Rode, in order to continue running Jersey Zoo. He ran it while the Durrells were away for seven months filming and even continued to run it for a while after he bought Exmouth Zoo. The relationship between the two men had though well and truly broken down and in 1963 he left Jersey and never saw Durrell again and was more-or-less airbrushed out of the story. He eventually had four small zoos in south-west England, one of which, the present Shaldon

Wildlife Trust, still exists.

He was born in Deddington in Oxfordshire, and Russell Tofts writes at great length (perhaps at too greater length) about his schooldays, one of his earliest jobs at Oxford Zoo (a long forgotten zoo which lasted less than six years), his wartime service in the RAF and then working at Whipsnade Zoo 1946-1947, where he first met Gerald Durrell.

This is primarily a book for the zoo buff. It has a wonderful collection of more than 80 old black-and-white photographs, many of them featuring Ken Smith either during his collecting days or his zoo days. My favourite, though it has no great relevance to the story, is the photo of the Regent Pet Stores, universally known as "Palmers", in Parkway, Camden Town, in the 1950s, for I was born and grew up nearby and cycled past it twice a day when I worked in the Bird House at London Zoo.

Animals in the Blood: The Ken Smith Story by Russell Tofts. ISBN 978-095315-884-3. Hardback, 232 pages, more than 80 photographs. Published by The Bartlett Society, 6 Queen Street, Dawlish, Devon EX7 9HB, UK. Website: <http://www.zoohistory.co.uk> Price £16.99, plus £3.99 p&p.

Malcolm Ellis

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PREPARING TO CELEBRATE ANNIVERSARY

A special celebration will take place on December 17th 2012 to mark the 40th Anniversary of Loro Parque, Tenerife. What has become the largest collection of parrots in the world, began with only 150 parrots and has grown step by step until today Loro Parque is home to a large and diverse collection of more than 500 species of birds and other animals. It still specialises in parrots, of course, and these will be at the heart of the celebration, but penguins (last year it bred two Southern Rockhopper Penguins *Eudyptes moseleyi* and several Gentoo *Pygoscelis papua*) and other birds (a Victoria Crowned Pigeon *Goura victoria* hatched in November 2011) have been added to the collection, as well as Killer Whales or Orcas *Orcinus orca*, white Bengal Tigers *Panthera t. tigris*, Western Lowland Gorillas *Gorilla g. gorilla* and many other attractions.

NEWS & VIEWS

NEWS FROM LORO PARQUE

Last year the Patagonian Conures *Cyanoliseus patagonus* were moved to other enclosures. Three subspecies - the nominate form or Lesser *C. p. patagonus*, Andean *C. p. andinus* and Greater *C. p. bloxami* - can now be seen living side by side and it is easier to appreciate the differences in size and coloration. The Greater began to breed for the first time while on public exhibition and, in June, was raising a youngster. A new aviary for South American conures, housing species such as the Blue-crowned *Aratinga acuticaudata* and Sun Conure *A. solstitialis*, was opened recently. It enables visitors to see large flocks of various species and observe how the different species interact with each other.

This year for the first time three young Purple-bellied Parrots *Triclaria malachitacea* were being reared by their parents without human assistance. A young Gang-gang Cockatoo *Callocephalum fimbriatum* had become a special favourite amongst staff at the baby station and a pair of Green-winged Macaws *Ara chloropterus* was fostering two young Hyacinth Macaws *Anodorhynchus hyacinthinus*.

In July, one of the fundación's older pairs of Hispanolan Amazons *Amazona ventralis* which had bred successfully in the past, but had not been successful since 2008, was rearing two chicks. Loro Parque Fundación is one of the few European zoo collections holding this species and if a self-sustaining breeding population is to be established the help of private breeders will be required.

A pair of Desmarest's Fig Parrots *Psittaculirostris desmarestii* was also rearing young. It is important that the parents are not disturbed following the hatching of the chicks, otherwise the chicks may be abandoned, killed or even eaten. About four weeks are allowed to elapse before the nest box is checked. Also gratifying is the fact that several pairs of Collared Lories *Phigys solitarius* are now breeding regularly and rearing their own young. They are breeding so successfully that some of these birds could be made available to other collections interested in breeding this species from the larger Fijian islands.

A very special breeding success was the hatching of three Philippine or Red-vented Cockatoo chicks *Cacatua haematuropygia*. A newly formed pair laid for the first time and all three eggs, which were incubated by the parents, hatched and the chicks were being well cared for by their parents. In the past the chicks had always been hand-reared.

Last year the first Blue-cheeked Amazon chick *A. dufresniana* was raised. This year two further chicks were being reared.

RAYMOND'S BIRDS

The male Purple-throated Fruitcrow *Querula purpurata* which previously belonged to our late President, Raymond Sawyer, has gone on breeding loan to Wuppertal Zoo in Germany, which is believed to be the first collection in the world to have succeeded in breeding this South American cotinga in captivity.



Chris Brack

Young Purple-throated Fruitcrow hatched at Wuppertal Zoo. The black plumage still shows remnants of the chick's buff-coloured down and it is this which gives the chick its speckled appearance.

I believe that several of Raymond's waders, such as the Redshanks *Tringa totanus*, Lapwings *Vanellus vanellus*, Masked Lapwings *V. miles*, Long-toed Lapwings *V. crassirostris*, Ringed Plovers *Charadrius hiaticula* and Little Ringed Plovers *C. dubius* but not the Oystercatchers *Haematopus ostralegus*, have gone to Exmoor Zoo, north Devon and the pair of Red-crested Turacos *Tauraco erythrolophus* to Tropiquaria, in Somerset. I understand that Chestnut Lodge has been sold, but I do not know who has bought it or what their plans are for the house and garden - or the aviaries.

* * *

CHESTER'S LATEST PROJECT

Chester Zoo's hugely ambitious £30 million (approx. US\$45 million) islands development, plans to bring "the Philippines, Papua New Guinea,

Bali, Sumatra, Sumba and Sulawesi to the heart of Cheshire.” It will showcase the zoo’s conservation work in the region and bring together animals such as Anoa *Bubalus depressicornis*, Babirusa *Babyrousa babyrussa*, the Bali Starling *Leucopsar rothschildi*, cassowary *Casuarius* sp., Rhinoceros Hornbill *Buceros rhinoceros*, Wrinkled Hornbill *Aceros corrugatus*, Sumatran Orangutan *Pongo abellii*, Sulawesi Macaque *Macaca nigra*, Sumatran Tiger *Panthera tigris sumatrae* and the Visayan Warty Pig *Sus cebifrons*.

Designed by architects from the dan pearlman group in Germany, the project will home in on the different animals and the different vegetation and architecture seen on the various islands and will take visitors on a journey which will include educational exhibits, play areas, restaurants and village-style food stands.

Work is expected to begin this autumn and the planned opening date is Easter 2015.

* * *

LAST YEAR AT WUPPERTAL ZOO

Zoo Wuppertal 130. Jahresbericht 2011 (the zoo’s Annual Report for last year), lists among the most important new arrivals: 0.1 Hyacinth Macaw *Anodorhynchus hyacinthinus*, 1.1 Black-billed Amazons *Amazona agilis*, 0.1 Spangled Cotinga *Cotinga cayana*, 1.1 Andean Cocks-of-the-Rock *Rupicola peruviana*, 1.1 Golden-headed Manakins *Pipra erythrocephala*, three Paradise Tanagers *Tangara chilensis* and 1.0 Fawn-breasted Bowerbird *Chlamydera cerviniventris*.

Birds bred during 2011 included: one King Penguin *Aptenodytes patagonicus*, six African (Black-footed or Jackass) Penguins *Spheniscus demersus*, one Elegant Crested Tinamou *Eudromia elegans*, one Scarlet Ibis *Eudocimus ruber*, one Cape Thick-knee *Burhinus capensis*, 37 Avocets *Recurvirostris avosetta*, 1.1 Red-crowned Cranes *Grus japonensis*, 0.1 Bateleur *Terathopius ecaudatus*, 0.3 Victoria Crowned Pigeons *Goura victoria*, two Beautiful Fruit Doves *Ptilinopus pulchellus*, five Barn Swallows *Hirundo rustica*, one Vermilion Flycatcher *Pyrocephalus rubinus*, two Brazilian Tanagers *Ramphocelus bresilius*, six Turquoise Tanagers *T. mexicana*, 13 Gouldian Finches *Erythrura gouldiae* and nine Bali Starlings *Leucopsar rothschildi*.

Chris Brack told me that the zoo has an Andean Flamingo *Phoenicopterus andinus* which was imported in 1971 by the dealer JABRIA. This means, of course, that it is at least 41 years of age. It has outlived the other five Andean Flamingos and six James’s Flamingos *P. jamesi* which arrived at the same time.

DESPITE THE WEATHER

Despite the exceptionally wet late spring and summer Paradise Park, at Hayle, here in Cornwall, enjoyed a successful breeding season with more chicks reared than the previous year. A pair of Galahs or Roseate Cockatoos *Eolophus roseicapilla* produced three chicks, which as usual were reared by their parents. The park, which is home to the World Parrot Trust (WPT), has a colony of 10 of these cockatoos in its Australian aviary. Keas *Nestor notabilis*, Blue-throated Macaws *Ara glaucogularis*, Citron-crested Cockatoos *Cacatua sulphurea citrinocristata*, White-bellied Caiques *Pionites leucogaster*, Plum-headed Parakeets *Psittacula cyanocephala* and Black-cheeked Lovebirds *Agapornis nigrigensis* all had a good breeding season. Six species of lorikeets successfully reared young, including two pairs of Goldie's Lorikeets *Psitteuteles goldei*. Golden Conures *Guaruba guarouba* and Mountain Parakeets *Psilopsiagon aurifrons* were incubating eggs in August. Avocets *Recurvirostra avosetta* sat through the heavy rain and when their chicks hatched led them to shelter. The flamingos *Phoenicopterus ruber* got no further than building nests.

* * *

SEEKING A REPLACEMENT

Since publication of the article on breeding the Blue-crowned Motmot *Momotus momota* in France (Vol.118, No.2, pp.63-76 (2012)), Parc Zoologique de Montpellier has lost its male Blue-crowned Motmot and is seeking a replacement. If you know where a replacement male may be obtained, please contact Patrick Chartier. E-mail:patrick.chartier.aves@gmail.com

* * *

A LITTLE DISAPPOINTING

Bernard Sayers describes the 2012 breeding season as having been a little disappointing. Bernard succeeded in breeding: four Burrowing Owls *Athene cunicularia*, four Indian Scops Owls *Otus bakkamoena*, two White-faced Owls *Ptilopsis leucotis*, three Boobook Owls *Ninox boobook*, two Tropical Screech Owls *Megascops choliba*, one Chaco Owl *Strix chacoensis*, two Striated Caracaras *Phalcoboenus australis*, one Sulawesi Ground Dove *Gallicolumba tristigmata*, two Triangular-spotted or Speckled Pigeons *Columba guinea*, one Red-collared Lorikeet *Trichoglossus (haematodus) rubritorquis*, two Swainson's *T. h. moluccanus*, several wild-type grey Java Sparrows *Padda oryzivora* and several Black-cheeked Lovebirds *Agapornis nigrigenis*.

THE AGE OF PARROTS

The Times, p.24, Saturday, September 15th 2012, reported the death of an African Grey Parrot *Psittacus erithacus*, belonging to a Mrs Morgan, of Exeter. The parrot was said to have been 55 years old (having been bought as a chick by Mrs Morgan in Tanzania in 1957) and was, according to the report, "believed to be one of the oldest domestic parrots in the world."

* * *

NEWLY APPOINTED CURATOR

Simon Matthews is leaving Waddesdon Manor Aviary to take up the position of Curator of Birds at Al Wabra Wildlife Preservation (AWWP) in Qatar, owned by Sheikh Saoud Bin Mohamed Bin Ali Al Thani. Al Wabra Wildlife Preservation is home to most of the captive population of Spix's Macaw *Cyanopsitta spixii* and aims to re-establish this species back in its natural habitat in Brazil, where it owns the 2,000 hectares (approx. 5,000 acres) Concordia Farm - the last recorded wild Spix's Macaw having been seen near Melância Creek - which flows through the property.

* * *

BISHOPS BREEDING IN CORWALL

A few weeks ago, former Hon. Secretary and Treasurer Paul Boulden, commented on the fact that, somewhat mysteriously, a number of Napoleon Weavers *Euplectes afer* have become available lately. Now comes news that this once common seed-eater, now more correctly known as the Yellow-crowned Bishop, has bred successfully in the new African Wetlands Aviary, opened earlier this year at Newquay Zoo. Several nests were built and chicks hatched. The birds appear to belong to the nominate subspecies, the breeding male of which has a broad yellow band across the breast. The new aviary also houses Superb Starlings *Lamprotornis superbus*, Blacksmith Plovers *Vanellus armatus* and Yellow-mantled Widowbirds *E. macroura*.

* * *

2013 SPRING SOCIAL MEETING

The society is planning to hold the 2013 Spring Social Meeting at Paignton Zoo Environmental Park on Saturday, April 27th, with visits to Newquay Zoo and Paradise Park at Hayle the following day, Sunday, April 28th. Further details of the arrangements, which are being made by Mike Curzon (E-mail: mcurzonmbe@hotmail.co.uk/Tel: 01373 824077), will be announced once they are finalised.

CONTINUING MASCARENES PROGRAMME

Chester Zoo's 2011 *Zoo Review* reports that there are (or were at the end of 2011) approximately 160 pairs of Mauritius Fody *Foudia rubra*. There is a remnant wild population on the island of Mauritius and a second population of translocated birds on the Ile aux Aigrettes. An attempt to create a third population, this time on Round Island, made a promising start but then the birds began to be predated by Keel-scaled Boas *Casarea dussumieri*, leaving just one remaining survivor. A further release of a small number of birds took place in late 2011.

Breeding activity by the Mauritius Olive White-eyes *Zosterops chloronothos* on the Iles aux Aigrettes was delayed by two months due to the worst drought for 40 years. Despite this, however, six chicks fledged successfully. On Mauritius, a record number of nests resulted in 10 chicks fledging and these provided a much needed boost to the population. Rat control is thought to have had a significant impact on the breeding success and is to be continued this year.

As part of the ongoing keeper exchange programme, two bird keepers from Chester Zoo joined the passerine field survey team and assisted with the monitoring of the Mauritius Fody and Mauritius Olive White-eye populations in the Black River Gorges National Park. It is hoped to eventually map the distribution and territories of these two endemic species.

OBITUARY

JEFFERY BOSWALL

Jeffery Boswall died aged 81 on August 15th 2012. Jeffery, who was with the BBC Natural History Unit at Bristol for 29 years and later worked for the RSPB (Royal Society for the Protection of Birds), wrote a number of articles for the magazine in the late 1970s and 1980s. Checking through these, I came up with a surprisingly long list, including articles on tool-use by birds and related behaviour (Vol.83, No.2, pp. 88-97, No.3, pp.146-159, No.4, pp.220-228 (1977), Vol.84, No.3, pp.162-166 (1978) & Vol.89, No.2, pp.94-108 (1983)), birds of Chengdu Zoo (Vol.92, No.1, pp.47-50 (1986)), some birds at three Chinese zoos (Vol.95, No.1, pp.31-36 (1989)) and a bird show in Moscow, arranged at the Zoological Museum during the 18th International Ornithological Congress in August 1982 (Vol.89, No.1, pp.47-49 (1983)). An obituary was published in *The Times*, p.81, Saturday, August 25th 2012.



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